## In the Claims

1.      (Currently amended) A data mining system comprising:

a client; and

a service broker ~~configured to include an interface to~~ operable to:

receive a consultation request from the client through a computer network, ~~wherein the service broker~~ the consultation request associated with data for consulting a Neugent;

~~forwards~~ forward the consultation request ~~to a~~ to the Neugent to invoke a consultation of the Neugent, ~~and~~ the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

~~forwards~~ forward to the client through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

2.      (Currently amended) The system of claim 1, wherein the consultation request ~~includes~~ comprises the data for consulting the Neugent.

3.      (Currently amended) The system of claim 2, wherein the Neugent is operable to perform ~~performs a~~ the predictive analysis of the data ~~included in~~ comprised by the consultation request.

4.      (Currently amended) The system of claim 1, wherein the consultation request ~~includes~~ comprises identification of a source of the data for consulting the Neugent.

5.      (Currently amended) The system of claim 4, wherein the Neugent is operable to perform ~~performs a~~ the predictive analysis of input data obtained from the source identified in the consultation request.

6.    (Currently amended) The system of claim 1, wherein the service broker is operable to:

receive ~~receives through the interface~~ a training request from the client, the training request ~~including~~ comprising training data~~, and~~ ; and

~~forwards~~ forward the training request ~~including~~ comprising the training data to the Neugent to invoke training of the Neugent with the training data.


7.    (Currently amended) The system of claim 6, wherein the training request ~~includes~~ comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.


8.    (Currently amended) The system of claim 6, wherein the service broker is operable to forward ~~forwards~~ to the client a training result object returned by the Neugent after training of the Neugent.


9.    (Currently amended) The system of claim 1, wherein the Neugent is operable to:

~~groups~~ group training data patterns into clusters, each cluster corresponding to a group of similar data patterns~~, and~~ ; and

~~predicts~~ predict a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.


10.    (Currently amended) The system of claim 1, wherein the Neugent is operable to:

~~groups~~ group training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns~~, and~~ ; and

~~predicts~~ predict a probability of membership of an input non-numeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.

11. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

~~forms~~ form a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns, ~~and~~ and determining for each cluster probabilities of transition from the cluster to each of the other clusters, ~~and~~ ; and

~~predicts~~ predict a probability of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.

12. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

~~forms~~ form an input-output model associated with a set of training data patterns, ~~and~~ ; and

~~predicts~~ predict an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

13. (Currently amended) The system of claim 1, wherein the Neugent is operable to:

~~forms~~ form rules associated with corresponding relationships in a set of training data patterns, ~~and~~ ; and

~~predicts~~ predict an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.

14. (Currently amended) The system of claim 1, wherein the Neugent ~~includes~~ comprises a functional-link net.

15. (Currently amended) The system of claim 1, wherein the service broker ~~is~~ comprises a remote server.

16. (Currently amended) The system of claim 15, wherein the consultation request ~~includes~~ comprises an Extended Markup Language document.

17.     (Original) The system of claim 15, wherein the Neugent is server-side.


18.     (Currently amended) A method for providing to a remote client machine a service to consult a Neugent, comprising:

receiving a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

forwarding the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forwarding to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.


19.     (Currently Amended) A computer system for providing to a remote client machine a service to consult a Neugent, comprising:

a processor; and

a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 18 ; and

a processor operable to execute the program instructions to:

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forward to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.


20.     (Canceled)

21.     (Canceled)


22.     (Currently amended) A method for providing to a remote client machine a service to train a Neugent, comprising:

receiving a train request from the remote client machine through a computer network, the train request associated with training data for training the Neugent;

forwarding the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

forwarding to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.


23.     (Currently amended) A computer system, comprising:

a processor; and

a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 22 ; and

a processor operable to execute the program instructions to:

receive a train request from the remote client machine through a computer network the train request associated with training data for training the Neugent;

forward the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

forward to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.


24.     (Canceled)

25.     (Canceled)


26.     (New) The method of claim 18, wherein the consultation request comprises the data for consulting the Neugent.


27.     (New) The method of claim 26, wherein the Neugent is operable to perform the predictive analysis of the data comprised by the consultation request.


28.     (New) The method of claim 18, wherein the consultation request comprises identification of a source of the data for consulting the Neugent.


29.     (New) The method of claim 28, wherein the Neugent is operable to perform the predictive analysis of input data obtained from the source identified in the consultation request.


30.     (New) The method of claim 18, comprising:

receiving a training request from the remote client machine, the training request comprising training data; and

forwarding the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.


31.     (New) The method of claim 30, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.


32.     (New) The method of claim 30, comprising forwarding to the remote client machine a training result object returned by the Neugent after training of the Neugent.

33.     (New) The method of claim 18, comprising:

grouping, at the Neugent training data patterns into clusters, each cluster corresponding to a group of similar data patterns; and

predicting, at the Neugent, a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.


34.     (New) The method of claim 18, comprising:

grouping, at the Neugent, training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and

predicting, at the Neugent, a probability of membership of an input non-numeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.


35.     (New) The method of claim 18, comprising:

forming, at the Neugent, a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and

predicting, at the Neugent, a probability of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.


36.     (New) The method of claim 18, comprising:

forming, at the Neugent, an input-output model associated with a set of training data patterns; and

predicting, at the Neugent, an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

37.     (New) The method of claim 18, comprising:

forming, at the Neugent, rules associated with corresponding relationships in a set of training data patterns; and

predicting, at the Neugent, an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.


38.     (New) The method of claim 18, wherein the Neugent comprises a functional-link net.


39.     (New) The method of claim 18, wherein the method is performed at a remote server.


40.     (New) The method of claim 39, wherein the consultation request comprises an Extended Markup Language document.


41.     (New) The method of claim 39, wherein the Neugent is server-side.


42.     (New) Software for providing to a remote client machine a service to consult a Neugent, the software being embodied in a computer-readable medium and when executed operable to:

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forward to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

43.    (New)  Software for providing to a remote client machine a service to train a
Neugent, the software being embodied in a computer-readable medium and when executed
operable to:

receive a train request from the remote client machine through a computer network
the train request associated with training data for training the Neugent;

forward the train request to the Neugent to invoke training of the Neugent, training of
the Neugent comprising causing the Neugent to perform a data analysis of the training data;
and

forward to the remote client machine through the computer network a training result
object returned by the Neugent, the training result object comprising a data classification
mechanism operable to facilitate performance of a predictive analysis by the Neugent.